HYMENOLEPIS WEINLAND, 1858 (CESTODA): PROPOSED DESIGNATION OF TYPE SPECIES. Z.N.(S.)1156

By the Secretary, International Commission on Zoological Nomenclature
(CIOMS Case No. 1)

There are two reasons why the Commission should give urgent consideration to the generic name *Hymenolepis* Weinland, 1858. The first is connected with the work of the Council of International Organisations of Medical Sciences, an affiliate of the World Health Organisation. This Council is drawing up an international nomenclature of diseases, in several volumes. Vol. II, part 4 deals with the parasitic diseases of the human species. The Commission's Secretariat has undertaken to verify the nomenclatural status of the scientific names involved (some 700 in number), excluding names in the order-class group. The second reason is that *Hymenolepis* was placed on the Official List by the ruling given in Opinion 77 (*Smiths. misc. Colls*, vol. 73(1), pp. 71–73, 1922); but when the first instalment of the Official List of Generic names in Zoology in book form was being prepared in 1958, the entry concerning *Hymenolepis* was found to be defective. The name was therefore given a number on the Official List (No. 243) but full publication of the entry was deferred.

2. The entry for *Hymenolepis* in Opinion 77 reads in full:

> '*Hymenolepis* Weinland, 1858a, 52; tsd *Taenia diminuta* Rud., 1819a, 689 (type host *Mus rattus*: Brazil). [HSW; S.]'

This is to be interpreted as follows: the references '1858a' and '1819a' are to the comprehensive bibliography published by Stiles & Hassall, 1902, in the *Index Catalogue of Medical and Veterinary Zoology*; 'tsd' means type [species] by subsequent designation; 'HSW; S' means that the case had been studied by a committee of the Helminthological Society of Washington and by Stiles.

3. The facts are that *Hymenolepis* was established by Weinland, 1858, pp. 49–57, by a lengthy discussion and description. Only one species, *H. flavopunctata* Weinland, 1858, ibid., is referred to the genus in the text, but in a footnote to p. 52 is found: 'The Taenioids belonging to this genus live in insectivorous Mammalia and birds, and we may distinguish two subgenera, which separate pretty well those of the Mammalia from those of the birds, viz.: Subg. 1, *Lepidotrias* Weinl. . . . Nearly all the species living in insectivorous Mammalia. As the type we may consider *Taenia murina,* Dujardin; and besides this belong here [10 previously described species] and *Hymenolepis flavopunctata*. Subg. 2, *Dilepis* Weinl. . . . The tapeworms of this subgenus live particularly in insectivorous birds and we may consider *Taenia angulata* Rudolphi as its type.' Three other previously described species were referred to *Dilepis*.

4. It will be seen that *Taenia diminuta* Rudolphi was not originally included in the genus and therefore that it cannot be the type species under

Article 67g. The type species, by original designation, is clearly *Taenia murina* Dujardin, and *Lepidotrias* is a junior objective synonym of *Hymenolepis*.

5. Stiles further misunderstood the situation when he said (1896, p. 32): 'Weinland proposed this genus, with *Taenia flavopunctata* as type, but as this form is identical with *Taenia diminuta* the name *H. diminuta* is here inserted as type species.' This has been accepted ever since. As *Hymenolepis* has been used in this sense in many hundreds of works, and is still so used, it is clearly desirable to regularise this usage. *H. diminuta* and *H. nana* (von Siebold, 1852) occur in humans and present medical problems. *Lepidotrias* does not appear ever to have been used.

6. The family-group name HYMENOLEPIDINAE (as 'Hymenolepinae') was established by Perrier, [1896], p. 1852.

7. According to Burt, 1980, the *H. diminuta* infests some 70 species and subspecies of mammals, including humans, and some birds, and is found in all countries. The larva infests some 57 species of insects, some of which are closely associated with humans. There is recent evidence of pathological effects in humans at the physiological and biochemical levels. He lists 348 references, about 75% of which have appeared in the last 50 years; they are by many different authors.

8. The International Commission on Zoological Nomenclature is accordingly requested:

(1) to use its plenary powers to set aside all fixations of type species hitherto made for *Hymenolepis* Weinland, 1858 and to designate *Taenia diminuta* Rudolphi, 1819 as type species of that genus;

(2) to place the generic name *Hymenolepis* Weinland, 1858 (gender: feminine), type species, by designation under the plenary powers in (1) above, *Taenia diminuta* Rudolphi, 1819, on the Official List of Generic Names in Zoology:

(3) to place the specific name *diminuta* Rudolphi, 1819, as published in the binomen *Taenia diminuta* (specific name of type species of *Hymenolepis* Weinland, 1858) on the Official List of Specific Names in Zoology;

(4) to place the family-group name HYMENOLEPIDINAE Perrier, [1896] (type genus *Hymenolepis* Weinland, 1858) on the Official List of Family-Group Names in Zoology.

REFERENCES

BURT, M. J. B. 1980 *in* ARAI, H. P. ed. *Biology of the tapeworm* Hymenolepis diminuta. Academic Press, 733 pp. (pp. 1–57).

RUDOLPHI, C. A. 1819. *Entozoorum Synopsis, cui accedunt mantissa duplex et indices locupletissimi.* Berlin, pp. x, 811 (p. 689).

STILES, C. W. 1896. Report on the present knowledge of the tapeworms of poultry. *Bull. Bur. Anim. Ind. U.S. Dept. Agric.*, no. 12, 73 pp., 20 pls.

WEINLAND D. F. 1858. *Human Cestoides. An essay on the tapeworms of Man.* Cambridge [Mass.], 93 pp.